

REMARKS

Claims 1-14 are now in this application. Claims 1-3 and 5-10 have been amended.

Claims 11-14 have been added.

No additional fee is due.

On the basis of the above amendments and remarks, reconsideration and allowance of the claims in the application are respectfully solicited.

Respectfully,

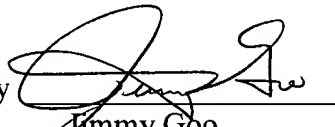
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MARKED UP VERSION OF CLAIMS

1. (once amended) A method of transmitting ~~user data in a TDMA system in which the number of channels is increased by partitioning at least one time slot in a TDMA frame into at least two sub time slots~~ in time slots in TDMA frames user data in bursts of GSM format, each burst comprising data portions separated by a training sequence, wherein a first data portion of a burst before the training sequence is used for data of a first user and a second data portion of the burst after the training sequence is used for data of a second user.
2. (once amended) The method of claim 1 in which each data portion is transmitted in a sub time-slot is allocated to a different user.
3. (once amended) The method of ~~claim 1 or~~ claim 2 in which user data is transmitted in each time slot in a burst structure, user data being transmitted in each sub time slot in a corresponding burst structure.
4. (no change) The method of claim 3 in which the user data is transmitted in each time slot in a burst structure having n bits and wherein each time slot is partitioned into m sub time slots, user data being transmitted in each sub time slot in a corresponding burst structure having n/m bits.
5. (once amended) The method of claim 3 ~~or claim 4~~ in which the user data comprises speech, ~~the burst structure being a GSM burst structure.~~
6. (once amended) The method of ~~any preceding~~ claim 1 in which the TDMA system is an EDGE packet switched network.
7. (once amended) The method of ~~any one of claims~~ claim 1 to 6 in which the TDMA system is a wireless system, wherein in the up-link data from p users is

encoded such that each forms  $1/p$  of an RLC/MAC block, wherein the up-link data from each user is encoded into a respective one of  $p$  sub-time-slots.

8. (once amended) The method of claim 7, ~~when dependent upon claim 6~~ wherein the RLC/MAC block is transmitted over four TDMA frames.
9. (once amended) The method of ~~any preceding~~ claim 1 wherein the user data is encoded into an RLC/MAC block for transmission, the RLC/MAC block being transmitted in a sub-time-slot over a plurality of frames.
10. (once amended) The method of ~~any preceding~~ claim 1 in which user data associated with at least two users is encoded into a single RLC/MAC block, the portions of the RLC/MAC block associated with respective users being transmitted in respective sub-time-slots.
11. (newly added) The method of claim 1 in which the user data is transmitted in each time slot in a burst structure having  $n$  bits and wherein each time slot is partitioned into  $m$  sub time slots, user data being transmitted in each sub time slot in a corresponding burst structure having  $n/m$  bits.
12. (newly added) The method of claim 11 in which the user data comprises speech.
13. (newly amended) The method of claim 12 in which the TDMA system is a wireless system, wherein in up-link data from  $p$  users is encoded such that each forms  $1/p$  of an RLC/MAC block, wherein the up-link data from each user is encoded into a respective one of  $p$  sub-time-slots.
14. (newly added) The method of claim 1, wherein the RLC/MAC block is transmitted over four TDMA frames.

1. (once amended) A method of transmitting ~~user data in a TDMA system in which the number of channels is increased by partitioning at least one time slot in a TDMA frame into at least two sub-time slots~~ in time slots in TDMA frames user data in bursts of GSM format, each burst comprising data portions separated by a training sequence, wherein a first data portion of a burst before the training sequence is used for data of a first user and a second data portion of the burst after the training sequence is used for data of a second user.  
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2. (once amended) The method of claim 1 in which each data portion is transmitted in a sub time-slot is allocated to a different user.  
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3. (once amended) The method of ~~claim 1 or~~ claim 2 in which user data is transmitted in each time slot in a burst structure, user data being transmitted in each sub time slot in a corresponding burst structure.  
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4. The method of claim 3 in which the user data is transmitted in each time slot in a burst structure having  $n$  bits and wherein each time slot is partitioned into  $m$  sub time slots, user data being transmitted in each sub time slot in a corresponding burst structure having  $n/m$  bits.  
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5. (once amended) The method of claim 3 ~~or claim 4~~ in which the user data comprises speech, ~~the burst structure being a GSM burst structure.~~
6. (once amended) The method of ~~any preceding~~ claim 1 in which the TDMA system is an EDGE packet switched network.  
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7. (once amended) The method of ~~any one of claims~~ claim 1 ~~to 6~~ in which the TDMA system is a wireless system, wherein in the up-link data from  $p$  users is encoded such that each forms  $1/p$  of an RLC/MAC block, wherein the up-link data from each user is encoded into a respective one of  $p$  sub-time-slots.  
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8. (once amended) The method of claim 7, ~~when dependent upon claim 6~~ wherein the RLC/MAC block is transmitted over four TDMA frames.
- 5 9. (once amended) The method of ~~any preceding~~ claim 1 wherein the user data is encoded into an RLC/MAC block for transmission, the RLC/MAC block being transmitted in a sub-time-slot over a plurality of frames.
- 10 10. (once amended) The method of ~~any preceding~~ claim 1 in which user data associated with at least two users is encoded into a single RLC/MAC block, the portions of the RLC/MAC block associated with respective users being transmitted in respective sub-time-slots.
- 15 11. (newly added) The method of claim 1 in which the user data is transmitted in each time slot in a burst structure having  $n$  bits and wherein each time slot is partitioned into  $m$  sub time slots, user data being transmitted in each sub time slot in a corresponding burst structure having  $n/m$  bits.
12. (newly added) The method of claim 11 in which the user data comprises speech.
- 20 13. (newly amended) The method of claim 12 in which the TDMA system is a wireless system, wherein in up-link data from  $p$  users is encoded such that each forms  $1/p$  of an RLC/MAC block, wherein the up-link data from each user is encoded into a respective one of  $p$  sub-time-slots.
- 25 14. (newly added) The method of claim 1, wherein the RLC/MAC block is transmitted over four TDMA frames.